1644 1600 #30

CRF Errors Corrected by the STIC Systems Branch

Serial Number: 09/189,702A ENTERED

CRF Processing Date: 12/30/2002
Edited by:
Verified by: AC (STIC staff)

☐ Changed a file from non-ASCII to ASCII

☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.

☐ Edited a format error in the Current Application Data section, specifically:

_____

☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other _____.

☐ Added the mandatory heading and subheadings for "Current Application Data".

☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.

☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically:

_____

☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were:

_____

☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

_____

☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.

☐ Inserted colons after headings/subheadings. Headings edited included:

_____

☐ Deleted extra, invalid, headings used by an applicant, specifically:

_____

☐ Deleted: ☐ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as_____.

☐ Inserted mandatory headings, specifically: _____

☐ Corrected an obvious error in the response, specifically:

_____

☐ Edited identifiers where upper case is used but lower case is required, or vice versa.

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JAN 0 2 2003
TECH CENTER 1600/2900

☐ Corrected an error in the Number of Sequences field, specifically:

_____

☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.

☐ Deleted *ending* stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____

☑ Other: corrected amino acid numbering

_____

_____

_____

*Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

3/1/95

1600

RAW SEQUENCE LISTING DATE: 12/30/2002
PATENT APPLICATION: **US/09/189,702A** TIME: 19:09:43

Input Set : **N:\AMC\6497882.txt**
Output Set: **N:\CRF4\12302002\I189702A.raw**

p.6

<110> APPLICANT: Sette, Alessandro
Sidney, John
Kast, W. Martin
Southwood, Scott
Epimmune, Inc.
<120> TITLE OF INVENTION: HLA Binding Peptides and Their Uses
<130> FILE REFERENCE: 39963-20019.20
<140> CURRENT APPLICATION NUMBER: US 09/189,702A
<141> CURRENT FILING DATE: 1998-11-10
<150> PRIOR APPLICATION NUMBER: US 08/205,713
<151> PRIOR FILING DATE: 1994-03-04
<160> NUMBER OF SEQ ID NOS: 380
<170> SOFTWARE: FastSEQ for Windows Version 3.0
<210> SEQ ID NO: 1
<211> LENGTH: 9
<212> TYPE: PRT
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Flu.24 peptide 17.0317
<400> SEQUENCE: 1
Leu Gln Ile Gly Asn Ile Ile Ser Ile
1 5
<210> SEQ ID NO: 2
<211> LENGTH: 9
<212> TYPE: PRT
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: CEA.432 peptide 38.0103
<400> SEQUENCE: 2
Asn Leu Ser Leu Ser Cys His Ala Ala
1 5
<210> SEQ ID NO: 3
<211> LENGTH: 9
<212> TYPE: PRT
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: CEA.605V9 peptide 1233.11
<400> SEQUENCE: 3
Tyr Leu Ser Gly Ala Asn Leu Asn Val
1 5
<210> SEQ ID NO: 4
<211> LENGTH: 9
<212> TYPE: PRT

RAW SEQUENCE LISTING DATE: 12/30/2002
PATENT APPLICATION: **US/09/189,702A** TIME: 19:09:43

Input Set : **N:\AMC\6497882.txt**
Output Set: **N:\CRF4\12302002\I189702A.raw**

60 <213> ORGANISM: Artificial Sequence
62 <220> FEATURE:
63 <223> OTHER INFORMATION: p53.149M2 peptide 1295.03
65 <400> SEQUENCE: 4
66 Ser Met Pro Pro Pro Gly Thr Arg Val
67 1 5
69 <210> SEQ ID NO: 5
70 <211> LENGTH: 9
71 <212> TYPE: PRT
72 <213> ORGANISM: Artificial Sequence
74 <220> FEATURE:
75 <223> OTHER INFORMATION: p53.149L2 peptide 1295.04
77 <400> SEQUENCE: 5
78 Ser Leu Pro Pro Pro Gly Thr Arg Val
79 1 5
81 <210> SEQ ID NO: 6
82 <211> LENGTH: 9
83 <212> TYPE: PRT
84 <213> ORGANISM: Artificial Sequence
86 <220> FEATURE:
87 <223> OTHER INFORMATION: p53.139 peptide 1317.24
89 <400> SEQUENCE: 6
90 Lys Thr Cys Pro Val Gln Leu Trp Val
91 1 5
93 <210> SEQ ID NO: 7
94 <211> LENGTH: 9
95 <212> TYPE: PRT
96 <213> ORGANISM: Artificial Sequence
98 <220> FEATURE:
99 <223> OTHER INFORMATION: p53.24V9 peptide 1323.02
101 <400> SEQUENCE: 7
102 Lys Leu Leu Pro Glu Asn Asn Val Val
103 1 5
105 <210> SEQ ID NO: 8
106 <211> LENGTH: 9
107 <212> TYPE: PRT
108 <213> ORGANISM: Artificial Sequence
110 <220> FEATURE:
111 <223> OTHER INFORMATION: p53.129B7V9 peptide 1323.04
113 <400> SEQUENCE: 8
114 Ala Leu Asn Lys Met Phe Asx Gln Val
115 1 5
118 <210> SEQ ID NO: 9
119 <211> LENGTH: 9
120 <212> TYPE: PRT
121 <213> ORGANISM: Artificial Sequence
123 <220> FEATURE:
124 <223> OTHER INFORMATION: p53.139L2B3 peptide 1323.06
126 <400> SEQUENCE: 9

RAW SEQUENCE LISTING DATE: 12/30/2002
PATENT APPLICATION: **US/09/189,702A** TIME: 19:09:43

Input Set : **N:\AMC\6497882.txt**
Output Set: **N:\CRF4\12302002\I189702A.raw**

```
127  Lys Leu Asx Pro Val Gln Leu Trp Val
128   1               5
130 <210> SEQ ID NO: 10
131 <211> LENGTH: 9
132 <212> TYPE: PRT
133 <213> ORGANISM: Artificial Sequence
135 <220> FEATURE:
136 <223> OTHER INFORMATION: p53.229B1L2V9 peptide 1323.08
138 <400> SEQUENCE: 10
139  Asx Leu Thr Ile His Tyr Asn Tyr Val
140   1               5
142 <210> SEQ ID NO: 11
143 <211> LENGTH: 10
144 <212> TYPE: PRT
145 <213> ORGANISM: Artificial Sequence
147 <220> FEATURE:
148 <223> OTHER INFORMATION: p53.188L2 peptide 1323.18
150 <400> SEQUENCE: 11
151  Leu Leu Pro Pro Gln His Leu Ile Arg Val
152   1               5                   10
154 <210> SEQ ID NO: 12
155 <211> LENGTH: 11
156 <212> TYPE: PRT
157 <213> ORGANISM: Artificial Sequence
159 <220> FEATURE:
160 <223> OTHER INFORMATION: p53.236 peptide 1323.29
162 <400> SEQUENCE: 12
163  Tyr Met Cys Asn Ser Ser Cys Met Gly Gly Met
164   1               5                   10
166 <210> SEQ ID NO: 13
167 <211> LENGTH: 11
168 <212> TYPE: PRT
169 <213> ORGANISM: Artificial Sequence
171 <220> FEATURE:
172 <223> OTHER INFORMATION: p53.236L2V11 peptide 1323.31
174 <400> SEQUENCE: 13
175  Tyr Leu Cys Asn Ser Ser Cys Met Gly Gly Val
176   1               5                   10
178 <210> SEQ ID NO: 14
179 <211> LENGTH: 11
180 <212> TYPE: PRT
181 <213> ORGANISM: Artificial Sequence
183 <220> FEATURE:
184 <223> OTHER INFORMATION: p53.101L2V11 peptide 1323.34
186 <400> SEQUENCE: 14
187  Lys Leu Tyr Gln Gly Ser Tyr Gly Phe Arg Val
188   1               5                   10
190 <210> SEQ ID NO: 15
191 <211> LENGTH: 9
```

192 <212> TYPE: PRT
193 <213> ORGANISM: Artificial Sequence
195 <220> FEATURE:
196 <223> OTHER INFORMATION: p53.135 peptide 1324.07
198 <400> SEQUENCE: 15
199 Cys Gln Leu Ala Lys Thr Cys Pro Val
200 1 5
202 <210> SEQ ID NO: 16
203 <211> LENGTH: 9
204 <212> TYPE: PRT
205 <213> ORGANISM: Artificial Sequence
207 <220> FEATURE:
208 <223> OTHER INFORMATION: p53.65L2 peptide 1325.01
210 <400> SEQUENCE: 16
211 Arg Leu Pro Glu Ala Ala Pro Pro Val
212 1 5
214 <210> SEQ ID NO: 17
215 <211> LENGTH: 9
216 <212> TYPE: PRT
217 <213> ORGANISM: Artificial Sequence
219 <220> FEATURE:
220 <223> OTHER INFORMATION: p53.187V9 peptide 1325.02
222 <400> SEQUENCE: 17
223 Gly Leu Ala Pro Pro Gln His Leu Val
224 1 5
226 <210> SEQ ID NO: 18
227 <211> LENGTH: 9
228 <212> TYPE: PRT
229 <213> ORGANISM: Artificial Sequence
231 <220> FEATURE:
232 <223> OTHER INFORMATION: MAGE3.112M2 peptide 1325.04
234 <400> SEQUENCE: 18
235 Lys Met Ala Glu Leu Val His Phe Leu
236 1 5
238 <210> SEQ ID NO: 19
239 <211> LENGTH: 9
240 <212> TYPE: PRT
241 <213> ORGANISM: Artificial Sequence
243 <220> FEATURE:
244 <223> OTHER INFORMATION: MAGE3.112L2 peptide 1325.05
246 <400> SEQUENCE: 19
247 Lys Leu Ala Glu Leu Val His Phe Leu
248 1 5
250 <210> SEQ ID NO: 20
251 <211> LENGTH: 9
252 <212> TYPE: PRT
253 <213> ORGANISM: Artificial Sequence
255 <220> FEATURE:
256 <223> OTHER INFORMATION: p53.135L2 peptide 1326.01

RAW SEQUENCE LISTING DATE: 12/30/2002
PATENT APPLICATION: **US/09/189,702A** TIME: 19:09:43

Input Set : **N:\AMC\6497882.txt**
Output Set: **N:\CRF4\12302002\I189702A.raw**

```
258 <400> SEQUENCE: 20
259  Cys Leu Leu Ala Lys Thr Cys Pro Val
260   1               5
262 <210> SEQ ID NO: 21
263 <211> LENGTH: 9
264 <212> TYPE: PRT
265 <213> ORGANISM: Artificial Sequence
267 <220> FEATURE:
268 <223> OTHER INFORMATION: p53.164L2 peptide 1326.02
270 <400> SEQUENCE: 21
271  Lys Leu Ser Gln His Met Thr Glu Val
272   1               5
274 <210> SEQ ID NO: 22
275 <211> LENGTH: 9
276 <212> TYPE: PRT
277 <213> ORGANISM: Artificial Sequence
279 <220> FEATURE:
280 <223> OTHER INFORMATION: p53.68L2V9 peptide 1326.04
282 <400> SEQUENCE: 22
283  Glu Leu Ala Pro Val Val Ala Pro Val
284   1               5
286 <210> SEQ ID NO: 23
287 <211> LENGTH: 10
288 <212> TYPE: PRT
289 <213> ORGANISM: Artificial Sequence
291 <220> FEATURE:
292 <223> OTHER INFORMATION: p53.136 peptide 1326.06
294 <400> SEQUENCE: 23
295  Gln Leu Ala Lys Thr Cys Pro Val Gln Val
296   1               5                   10
298 <210> SEQ ID NO: 24
299 <211> LENGTH: 9
300 <212> TYPE: PRT
301 <213> ORGANISM: Artificial Sequence
303 <220> FEATURE:
304 <223> OTHER INFORMATION: p53.168L2 peptide 1326.08
306 <400> SEQUENCE: 24
307  His Leu Thr Glu Val Val Arg Arg Val
308   1               5
310 <210> SEQ ID NO: 25
311 <211> LENGTH: 11
312 <212> TYPE: PRT
313 <213> ORGANISM: Artificial Sequence
315 <220> FEATURE:
316 <223> OTHER INFORMATION: peptide 1329.01
318 <400> SEQUENCE: 25
319  Lys Thr Tyr Gln Gly Ser Tyr Gly Phe Arg Leu
320   1               5                   10
322 <210> SEQ ID NO: 26
```

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 12/30/2002
PATENT APPLICATION: **US/09/189,702A** TIME: 19:09:44

Input Set : **N:\AMC\6497882.txt**
Output Set: **N:\CRF4\12302002\I189702A.raw**

Please Note:
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:194; Xaa Pos. 2
Seq#:195; Xaa Pos. 6
Seq#:196; Xaa Pos. 2
Seq#:197; Xaa Pos. 8
Seq#:218; Xaa Pos. 1,2,3,5,6,8
Seq#:378; Xaa Pos. 1,2,3,4,5,6,8
Seq#:379; Xaa Pos. 1,2,3,4,5,6,7
Seq#:380; Xaa Pos. 1,3,4,5,7,8,9,10

1600

RAW SEQUENCE LISTING DATE: 12/26/2002
PATENT APPLICATION: **US/09/189,702A** TIME: 13:13:23

Input Set : **D:\39963-20019.txt**
Output Set: **N:\CRF4\12262002\I189702A.raw**

```
  3 <110> APPLICANT: Sette, Alessandro
  4       Sidney, John
  5       Kast, W. Martin
  6       Southwood, Scott
  7       Epimmune, Inc.
  9 <120> TITLE OF INVENTION: HLA Binding Peptides and Their Uses
 11 <130> FILE REFERENCE: 39963-20019.20
 13 <140> CURRENT APPLICATION NUMBER: US 09/189,702A
C--> 14 <141> CURRENT FILING DATE: 2002-12-26 1998-11-10
 16 <150> PRIOR APPLICATION NUMBER: US 08/205,713
 17 <151> PRIOR FILING DATE: 1994-03-04
 19 <160> NUMBER OF SEQ ID NOS: 380
 20 <170> SOFTWARE: FastSEQ for Windows Version 3.0
```

Does Not Comply
Corrected Diskette Needed
do edit

ERRORED SEQUENCES

```
2643 <210> SEQ ID NO: 218
2644 <211> LENGTH: 10
2645 <212> TYPE: PRT
2646 <213> ORGANISM: Artificial Sequence
2648 <220> FEATURE:
2649 <223> OTHER INFORMATION: HLA-A1 allele-specific motif
2651 <220> FEATURE:
2652 <221> NAME/KEY: VARIANT
2653 <222> LOCATION: (1)...(10)
2654 <223> OTHER INFORMATION: Xaa at location 1 is any amino acid;
2655       Xaa at location 2 is S or T;
2656       Xaa at location 3 is D or E;
2657       Xaa at location 5 is any amino acid;
W--> 2658 <220> FEATURE:
2659 <223> OTHER INFORMATION: Xaa at location 6 is any amino acid;
2660       Xaa at location 8 is any amino acid
2663 <400> SEQUENCE: 218
W--> 2664 Xaa Xaa Xaa Pro Xaa Xaa Leu Xaa Tyr Lys
E--> 2665  1      5          10   misaligned amino acid nos.
4576 <210> SEQ ID NO: 378
4577 <211> LENGTH: 10
4578 <212> TYPE: PRT
4579 <213> ORGANISM: Artificial Sequence
4581 <220> FEATURE:
4582 <223> OTHER INFORMATION: HLA-A3,2 allele-specific motif
4584 <220> FEATURE:
```

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/189,702A

DATE: 12/26/2002
TIME: 13:13:23

Input Set : D:\39963-20019.txt
Output Set: N:\CRF4\12262002\I189702A.raw

4585 <221> NAME/KEY: VARIANT
4586 <222> LOCATION: (1)...(10)
4587 <223> OTHER INFORMATION: Xaa at location 1 is any amino acid;
4588 Xaa at location 2 is V, L, or M;
4589 Xaa at location 3 is Y or D;
4590 Xaa at location 4 is any amino acid;
W--> 4591 <220> FEATURE:
4592 <223> OTHER INFORMATION: Xaa at location 5 is any amino acid;
4593 Xaa at location 6 is any amino acid;
4594 Xaa at location 8 is Q or N
4596 <400> SEQUENCE: 378
W--> 4597 Xaa Xaa Xaa Xaa Xaa Xaa Ile Xaa Lys Lys
E--> 4598 1 5 10
4601 <210> SEQ ID NO: 379
4602 <211> LENGTH: 10
4603 <212> TYPE: PRT
4604 <213> ORGANISM: Artificial Sequence
4606 <220> FEATURE:
4607 <223> OTHER INFORMATION: HLA-A11 allele-specific motif
4609 <220> FEATURE:
4610 <221> NAME/KEY: VARIANT
4611 <222> LOCATION: (1)...(10)
4612 <223> OTHER INFORMATION: Xaa at location 1 is any amino acid;
4613 Xaa at location 2 is T or V;
4614 Xaa at location 3 is M or F;
4615 Xaa at location 4 is any amino acid;
W--> 4616 <220> FEATURE:
4617 <223> OTHER INFORMATION: Xaa at location 5 is any amino acid;
4618 Xaa at location 6 is any amino acid;
4619 Xaa at location 7 is any amino acid
4621 <400> SEQUENCE: 379
W--> 4622 Xaa Xaa Xaa Xaa Xaa Xaa Xaa Gln Lys Lys
E--> 4623 1 5 10
4625 <210> SEQ ID NO: 380
4626 <211> LENGTH: 10
4627 <212> TYPE: PRT
4628 <213> ORGANISM: Artificial Sequence
4630 <220> FEATURE:
4631 <223> OTHER INFORMATION: HLA-A24.1 allele-specific motif
4633 <220> FEATURE:
4634 <221> NAME/KEY: VARIANT
4635 <222> LOCATION: (1)...(10)
4636 <223> OTHER INFORMATION: Xaa at location 1 is any amino acid;
4637 Xaa at location 3 is I or M;
4638 Xaa at location 4 is D, E, G K or P;
4639 Xaa at location 5 is L, M or N;
W--> 4640 <220> FEATURE:
4641 <223> OTHER INFORMATION: Xaa at location 7 is N or V;
4642 Xaa at location 8 is A, E, K, Q or S;

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/189,702A

DATE: 12/26/2002
TIME: 13:13:23

Input Set : D:\39963-20019.txt
Output Set: N:\CRF4\12262002\I189702A.raw

```
     4643       Xaa at location 9 is F or L;
     4644       Xaa at location 10 is F or A
     4646 <400> SEQUENCE: 380
W--> 4647 Xaa Tyr Xaa Xaa Xaa Val Xaa Xaa Xaa Xaa
E--> 4648  1       5        10
```

VERIFICATION SUMMARY DATE: 12/26/2002
PATENT APPLICATION: **US/09/189,702A** TIME: 13:13:24

Input Set : **D:\39963-20019.txt**
Output Set: **N:\CRF4\12262002\I189702A.raw**

L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:2347 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:2351 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:194
L:2352 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:194 after pos.:0
L:2363 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:2367 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:195
L:2368 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:195 after pos.:0
L:2379 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:2383 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:196
L:2384 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:196 after pos.:0
L:2395 M:281 W: Numeric Fields not Ordered, <221> Sort in ascending order!
L:2399 M:258 W: Mandatory Feature missing, <220> Tag not found for SEQ ID#:197
L:2400 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:197 after pos.:0
L:2658 M:283 W: Missing Blank Line separator, <220> field identifier
L:2664 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:218 after pos.:0
L:2665 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:218
L:4591 M:283 W: Missing Blank Line separator, <220> field identifier
L:4597 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:378 after pos.:0
L:4598 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:378
L:4616 M:283 W: Missing Blank Line separator, <220> field identifier
L:4622 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:379 after pos.:0
L:4623 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:379
L:4640 M:283 W: Missing Blank Line separator, <220> field identifier
L:4647 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:380 after pos.:0
L:4648 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:380